

REMARKS

Claims 1-15 and 21-25 remain active in this application. Claims 16 - 20 have previously been canceled. Claims 1, 2, 11, and 22 have been amended to emphasize novel features of the invention and avoid the product-by-process analysis applied by the Examiner. Support for the amendments of the claims is found throughout the application, particularly in Figure 8 and the description thereof in paragraphs 0006 and 0025. No new matter has been introduced into the application. The continued indication of allowability of the subject matter of claims 6 - 9 and 12 - 14 is noted with appreciation.

Claims 1 - 5, 11, and 21-25 have been rejected under 35 U.S.C. §102 as being anticipated by Krivokapic; the Examiner continuing to apply a product-by-process analysis thereto and asserting inherency in regard to claims 3 and 4. Claims 10 and 15 have additionally been rejected under 35 U.S.C. §103 as being unpatentable over Krivokapic in view of Bae. Both of these grounds of rejection are respectfully traversed for the reasons of record, which is hereby fully incorporated by reference, as well as the amendments above and remarks provided below.

It should first be noted that claims 1, 2, 11 and 22 have been amended to emphasize that the discontinuity is aligned to the gate structure. The phrase “aligned to” or “self-aligned to” is clearly a structural recitation, rather than a process limitation, that indicates the location of the discontinuity of the discontinuous film in relation to the gate structure. Accordingly, it is respectfully requested that the rejection based on the product-by-process analysis be withdrawn.

Further, neither Krivokapic nor Bae alone or in combination, teach or suggest a discontinuous film with a discontinuity aligned to a gate structure. With regard to Krivokapic, Figure 4 shows an opening 28 formed in the oxide layer 30. The opening 28 is not aligned to anything, rather it is formed by etching the oxide layer 30. In fact, as shown in Figure 5a, the NiSi_2 layer 42 is first formed in the middle of the silicon layer 40 and, because it is formed in the middle, is aligned to the opening 28. As discussed at column 2, lines 51-55:

As shown in FIGS. 5a and 5b, nickel enhanced re-crystallization forms a layer 42 of NiSi_2 in the *middle* of the amorphous silicon layer 40. The re-crystallization process thus aligns the NiSi_2 layer 42 *to the opening* defined for the NiSi_2 gate 44, as shown in FIG. 5b (emphasis added).

Therefore, the structure of Krivokapic cannot achieve the structural alignment claimed but only, at best, an approximation fully subject to lithographic overlay registration errors between the discontinuity and isolation areas 24 as well as process variation. In other words, Krivokapic fails to teach or suggest a discontinuous film with a discontinuity aligned to a gate structure because the opening 28 in Krivokapic is etched prior to the formation of layer 42 and, thus, cannot be aligned to anything, much less a subsequently formed gate structure.

The same is true with respect to Bae. Although the Examiner has not cited Bae for teaching or suggesting a discontinuous film with a discontinuity aligned to (or with) a gate structure, it is clearly shown in the Figures that any element that may be considered a discontinuity is clearly not aligned to (or with) a gate structure.

In view of the foregoing, it is respectfully submitted that the grounds of rejection maintained by the Examiner are clearly in error and untenable. Accordingly, it is respectfully requested that the rejections be withdrawn and claims 1-5, 10, 11, 15 and 21-25 be allowed.

As discussed in the previous responses, applying a product-by-process analysis to a claim based on an allegedly similar reference does not countenance dismissal of the novel aspects of a claimed invention. Rather, the burden shifts to Applicant to show an unobvious difference (see MPEP §2113) between the invention and the reference as has been repeatedly done. Assuming, *arguendo*, that the Examiner met his initial burden under 35 U.S.C. §102 by correctly applying a product-by-process analysis, Applicant has *continuously* met its shifted burden of proving of the differences between the claimed invention and Krivokapic (see the remarks filed August 16, 2005, December 19, 2005, and July 11, 2006), and has, thus, *continuously* shifted the burden back to the Examiner to otherwise demonstrate anticipation or obviousness of the claimed subject matter. In other words, Applicant has met its burden by demonstrating significant differences and fully answered all possible assertions of apparent similarity of the structure of the invention and the reference which has not been answered by the Examiner, in the absence of which, the Examiner may not continue to ignore demonstrated novel and unobvious differences supporting meritorious unexpected effects by adhering to a product-by-process rationale. Moreover, the Examiner's analysis is improper since it is asserted essentially as a basis for ignoring the demonstrated differences; a position not


condoned by precedent (*see e.g., Ex parte Kung*, 17 USPQ2d 1545 (1989)), while the Examiner has cited no authority for the position taken which improperly relies on a construction of a reference contrary to the explicit disclosure thereof.

In view of the foregoing, it is respectfully submitted that the grounds of rejection maintained by the Examiner are clearly in error and untenable. Accordingly, reconsideration and withdrawal thereof are respectfully requested.

Since all rejections, objections and requirements contained in the outstanding official action have been fully answered and shown to be in error and/or inapplicable to the present claims, it is respectfully submitted that reconsideration is now in order under the provisions of 37 C.F.R. §1.111(b) and such reconsideration is respectfully requested. Upon reconsideration, it is also respectfully submitted that this application is in condition for allowance and such action is therefore respectfully requested.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 09-0458 of International Business Machines Corporation (E. Fishkill).

Respectfully submitted,



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